Mini System

CMB1100/55

Service

Service

Service Manual

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CLASS 1
LASER PRODUCT

Version1.0

314178537050

PHILIPS

METHOD OF DISASSEMBLING CMB1100

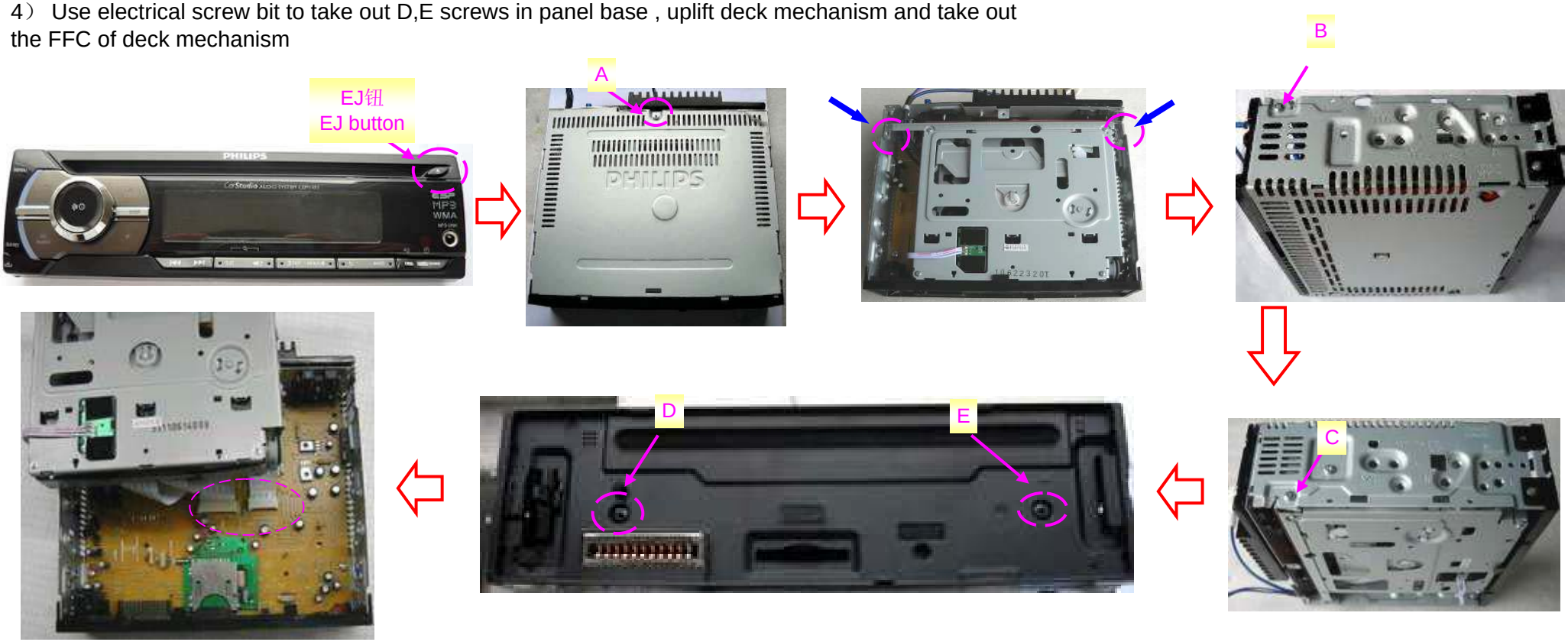
一、The procedure of disassembling the unit

1) Press EJ button and take out panel, Use electrical screw bit to take out the A screw in top cover

2） Use tweezer to prize up top cover as blue arrow direction that below picture showed

3） Use electrical screw bit to take out B,C two screws in left and right side of metal bracket

4） Use electrical screw bit to take out D,E screws in panel base , uplift deck mechanism and take out the FFC of deck mechanism



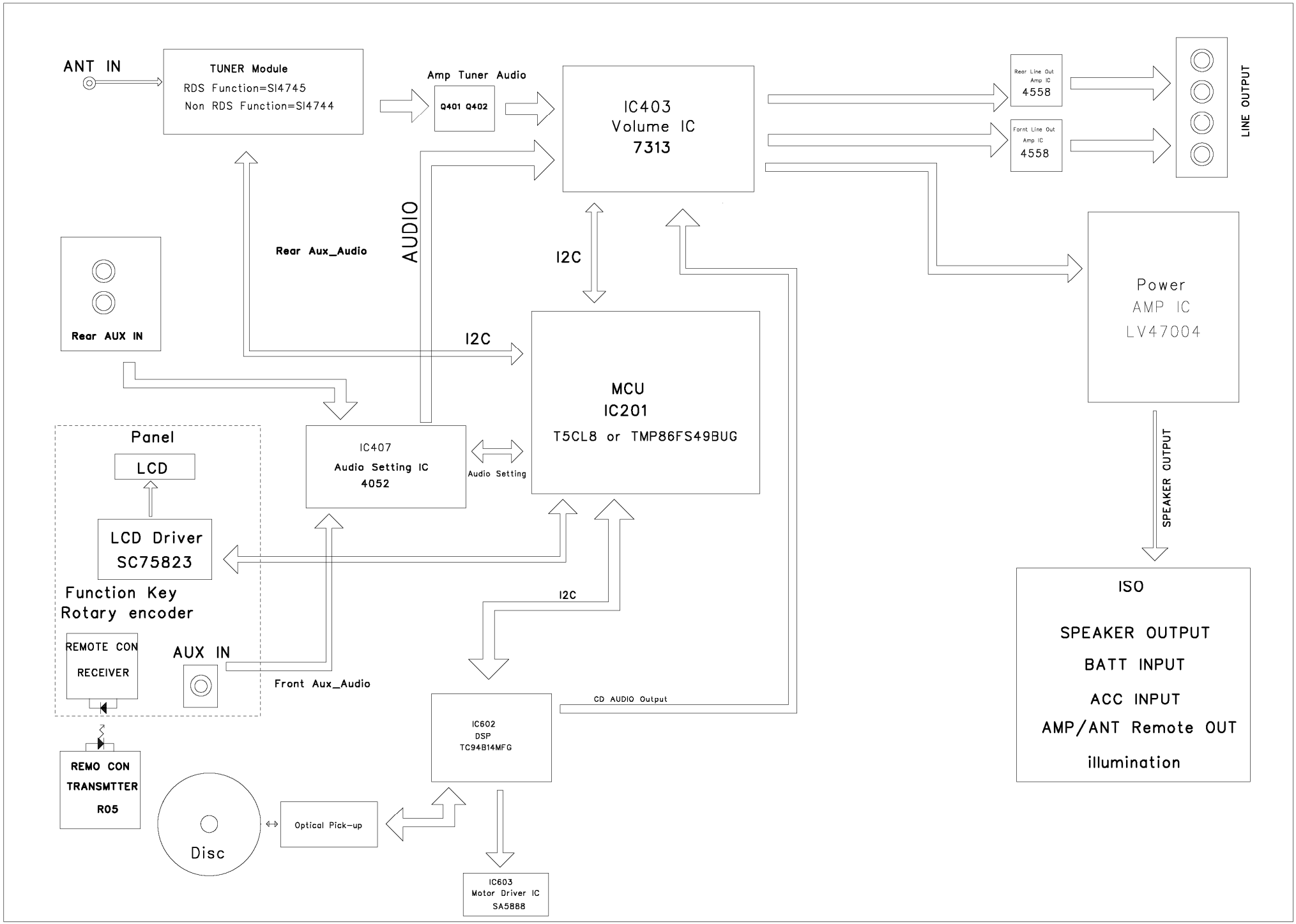
二、The procedure of disassembling the panel

1） Use electrical screw bit to take out five screws in back panel

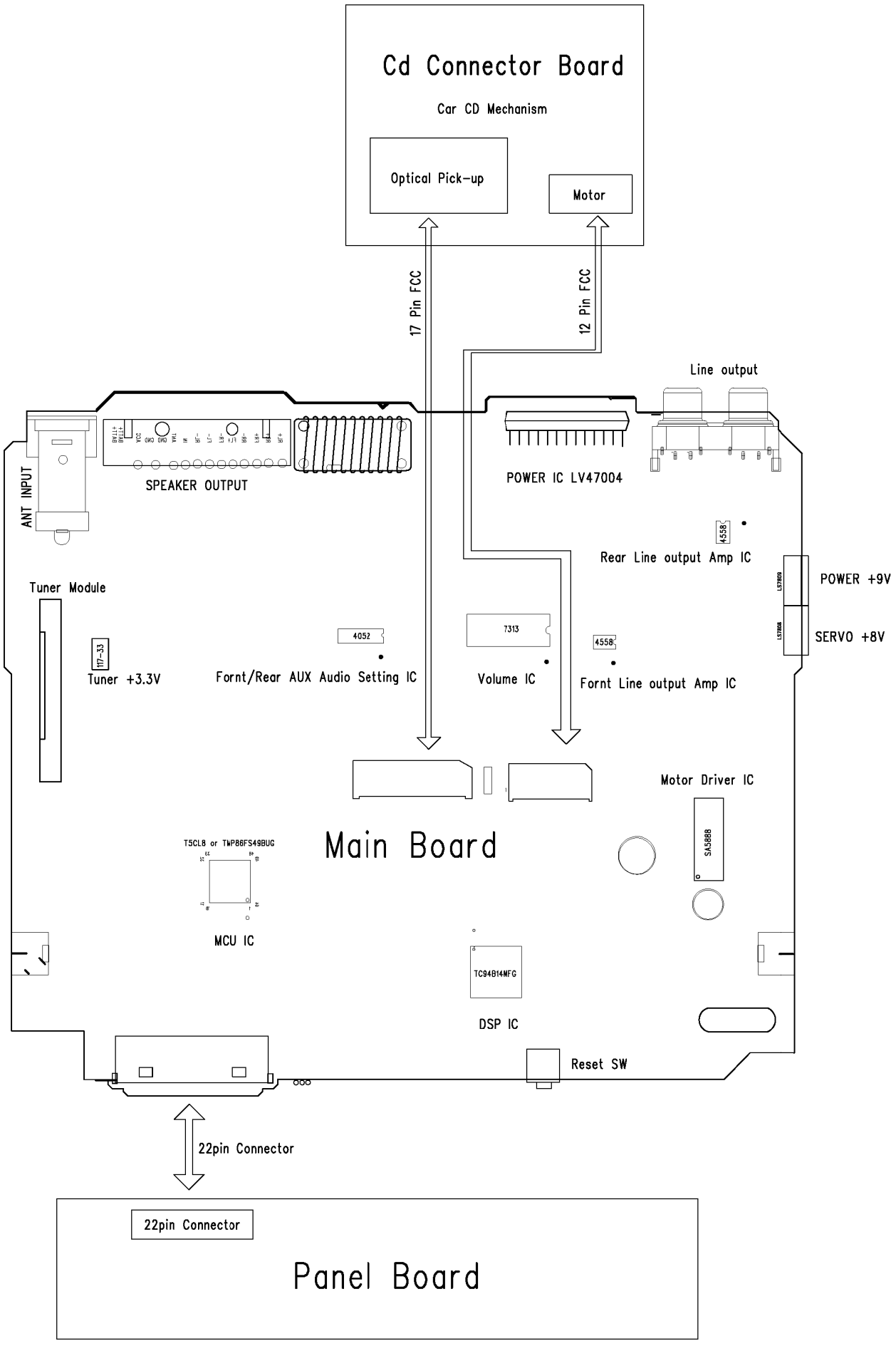
2）Separate back panel and front panel

3）Take out KB board

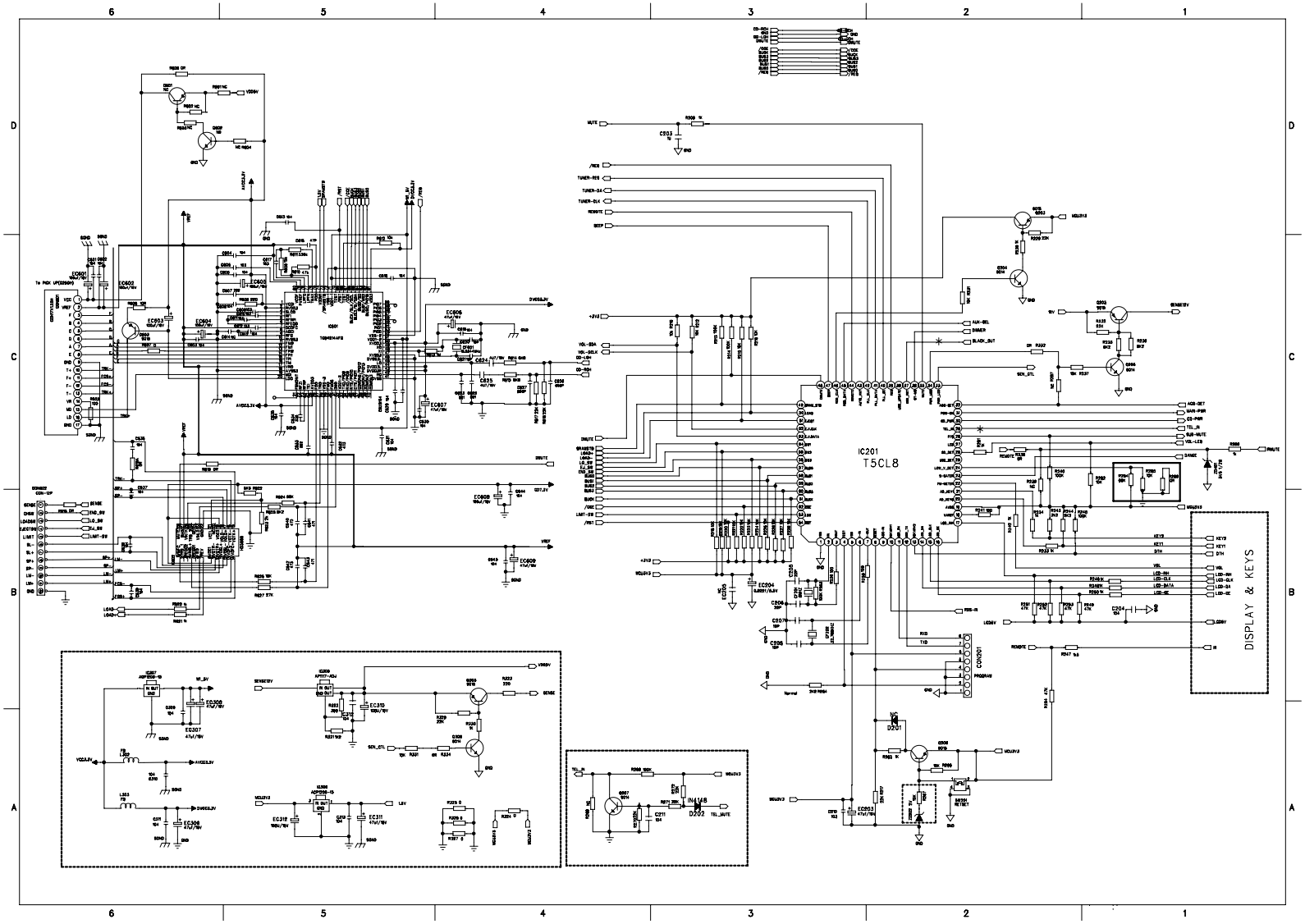
BLOCK DIAGRAM

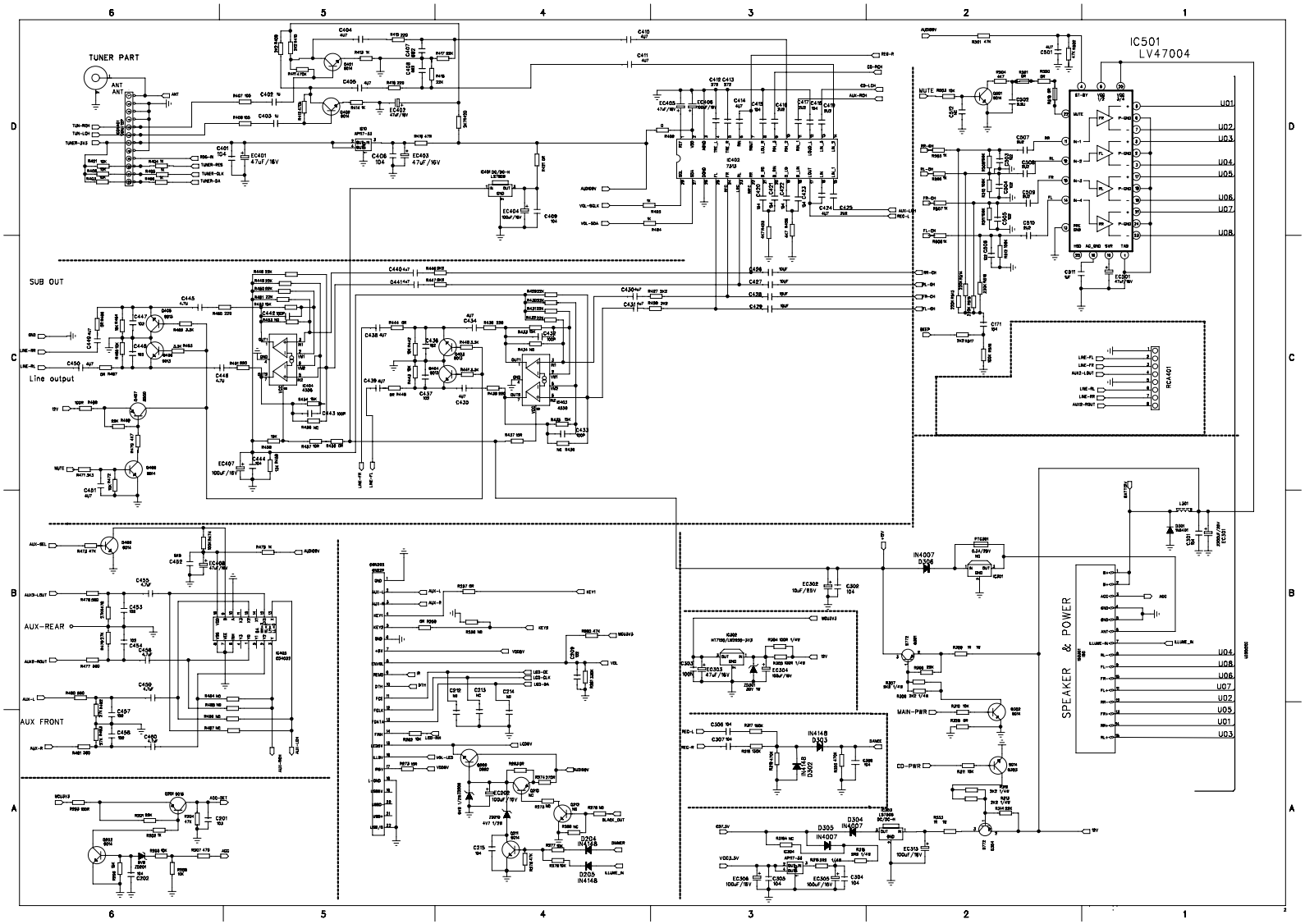


WIRING DIAGRAM

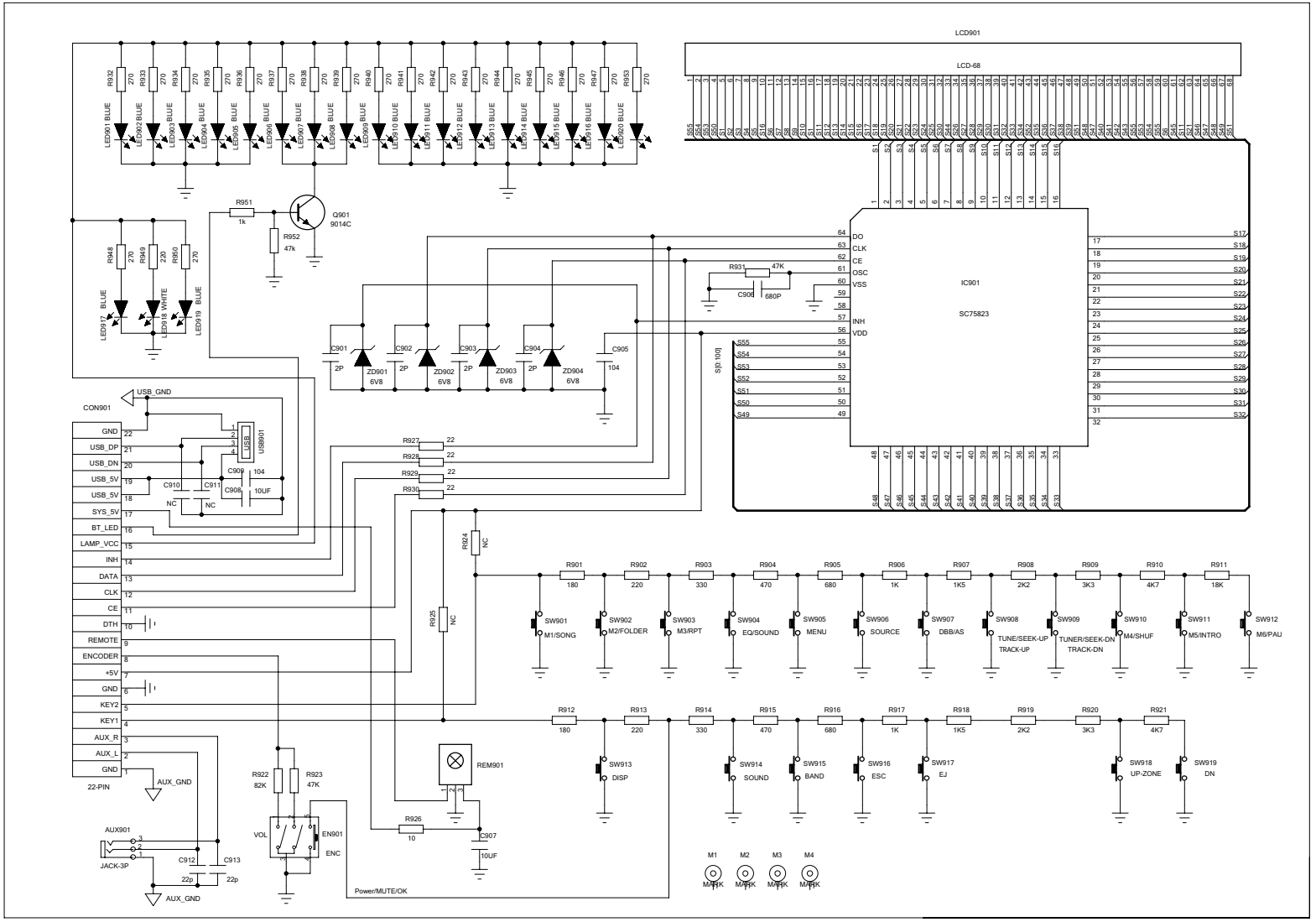


CIRCUIT DIAGRAM -MAIN BOARD

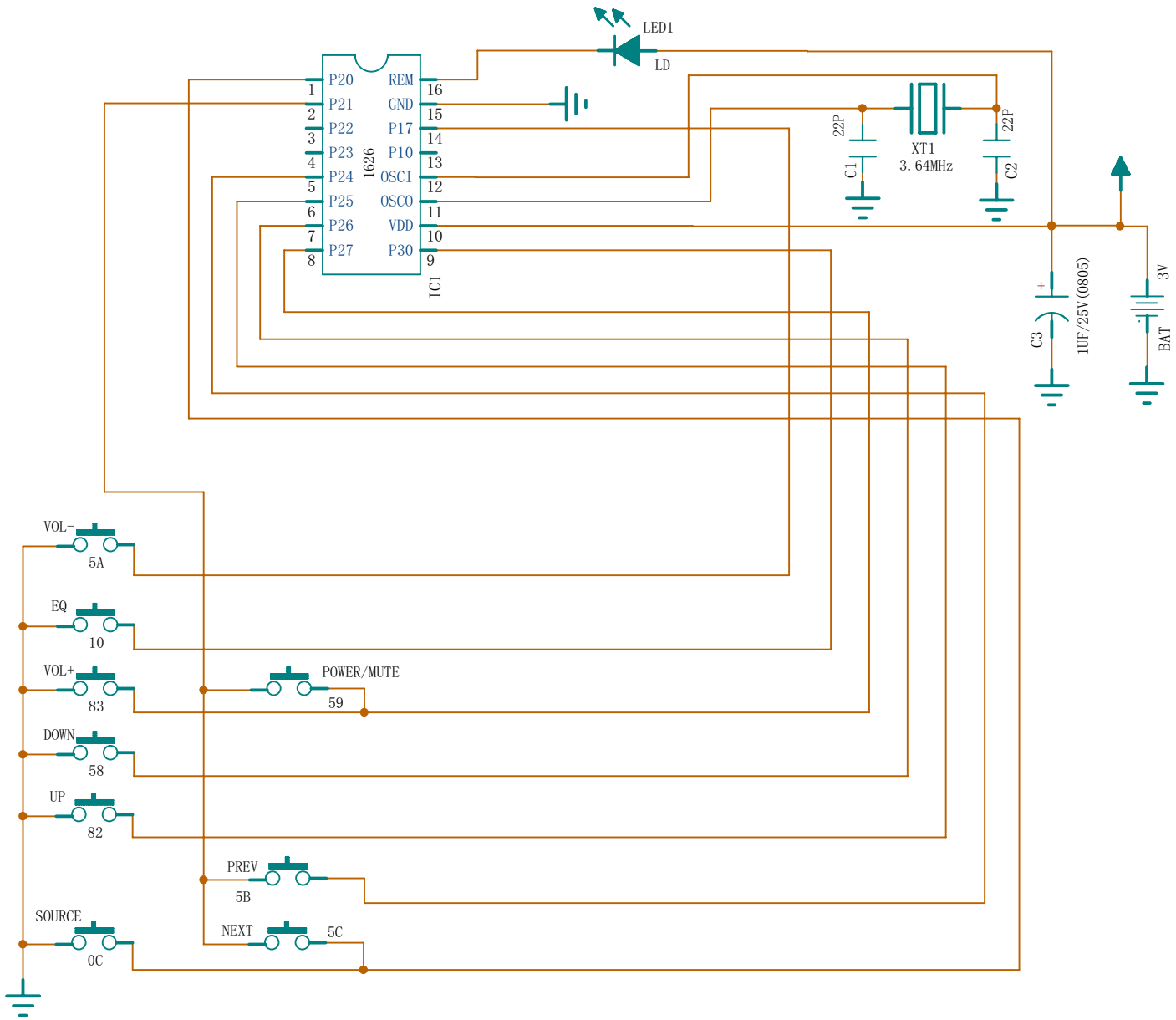



TUNER PART
SUB OUT
Line output
AUX-REAR
AUX FRONT
IC501
LV47004
SPEAKER & POWER
MAIN-PWR
CD-PWR
RCA401

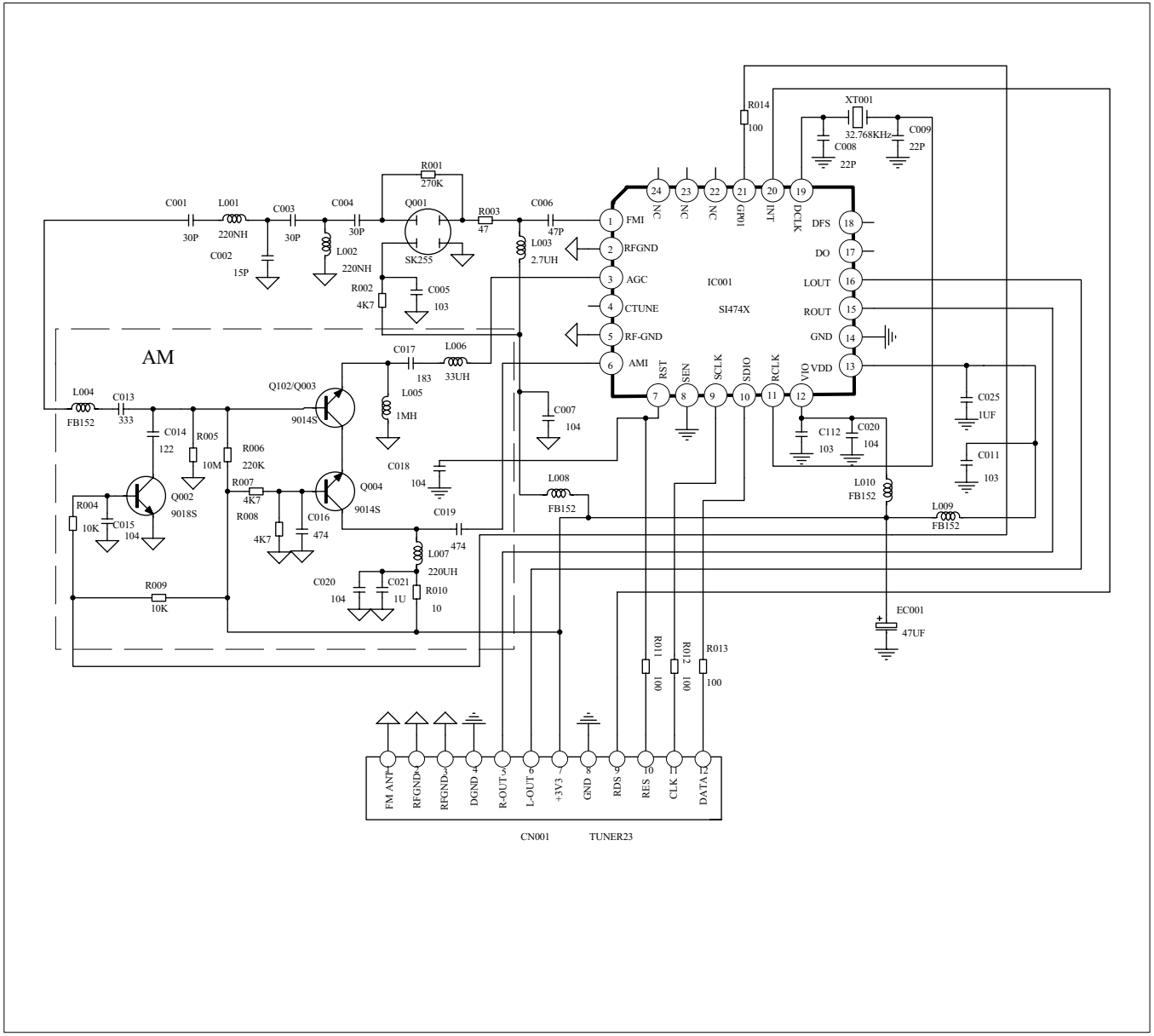
CIRCUIT DIAGRAM -PANEL BOARD



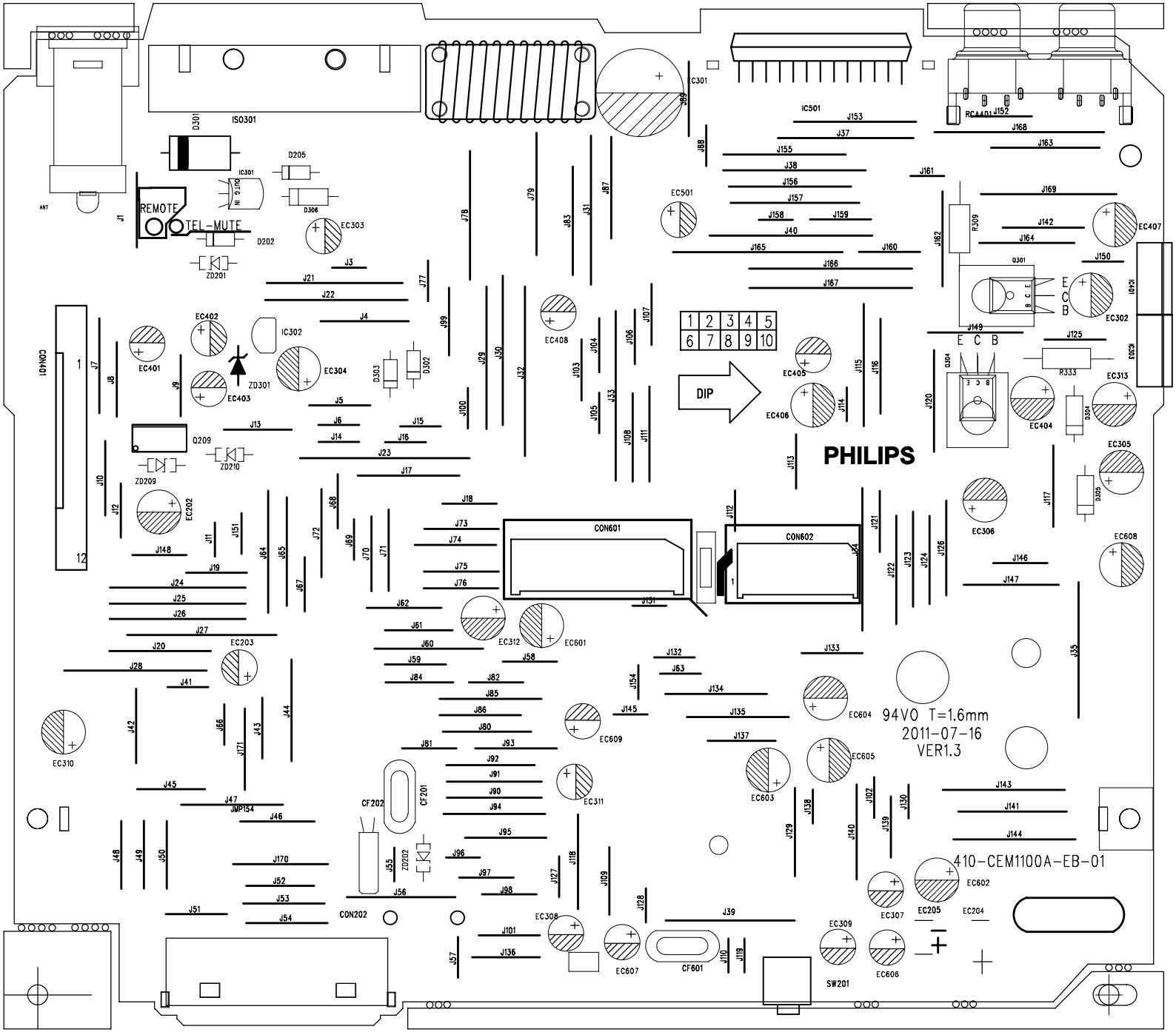
CIRCUIT DIAGRAM -REMOTE BOARD



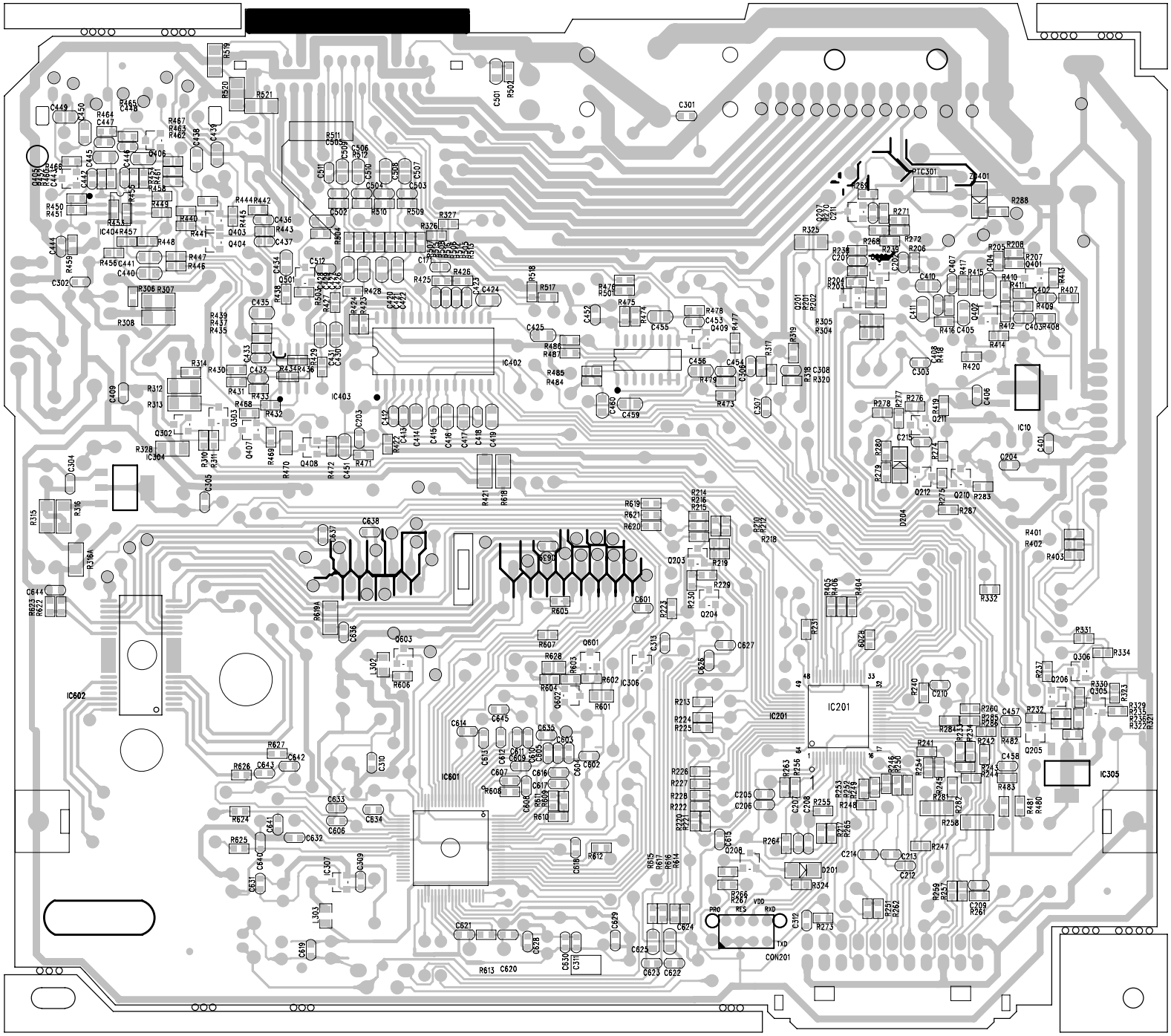
CIRCUIT DIAGRAM -TUNER BOARD



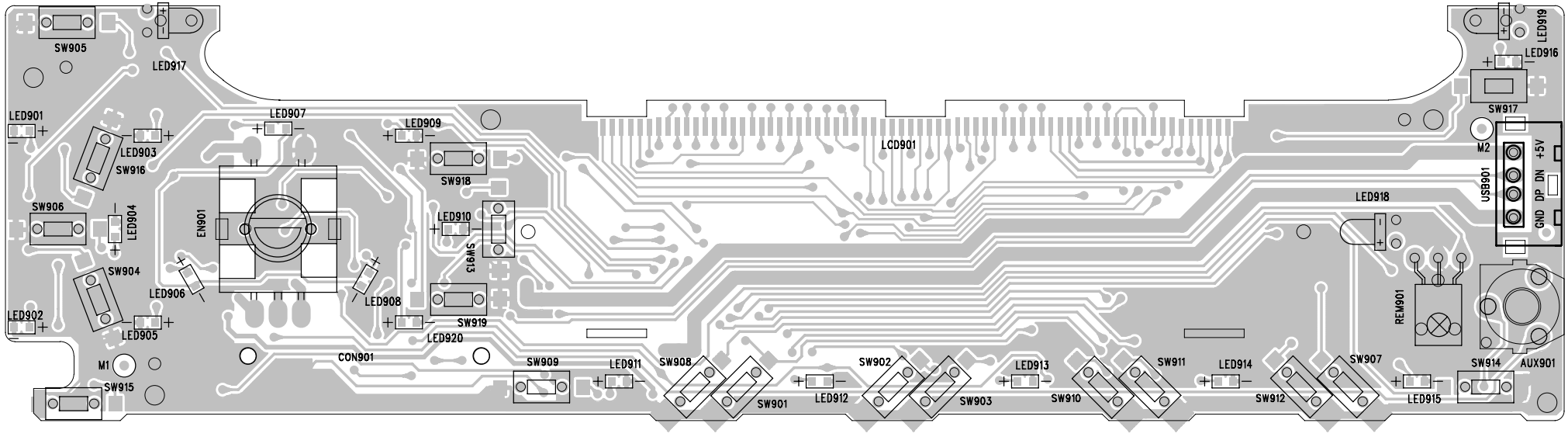
PCB LAYOUT-MAIN BOARD TOP SIDE VIEW



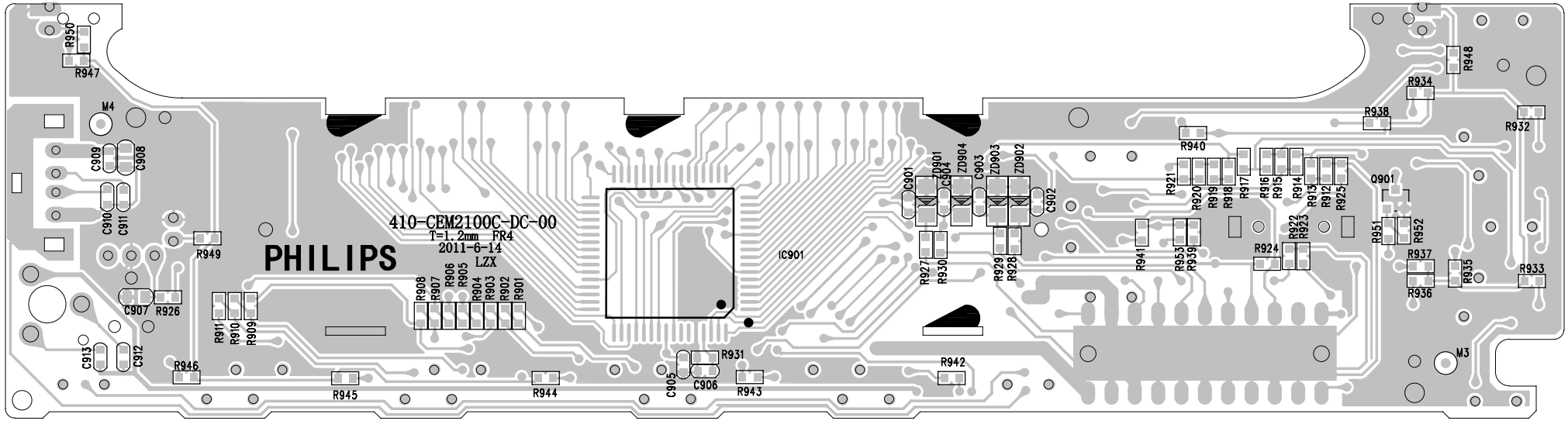
PCB LAYOUT-MAIN BOARD BOTTOM SIDE VIEW



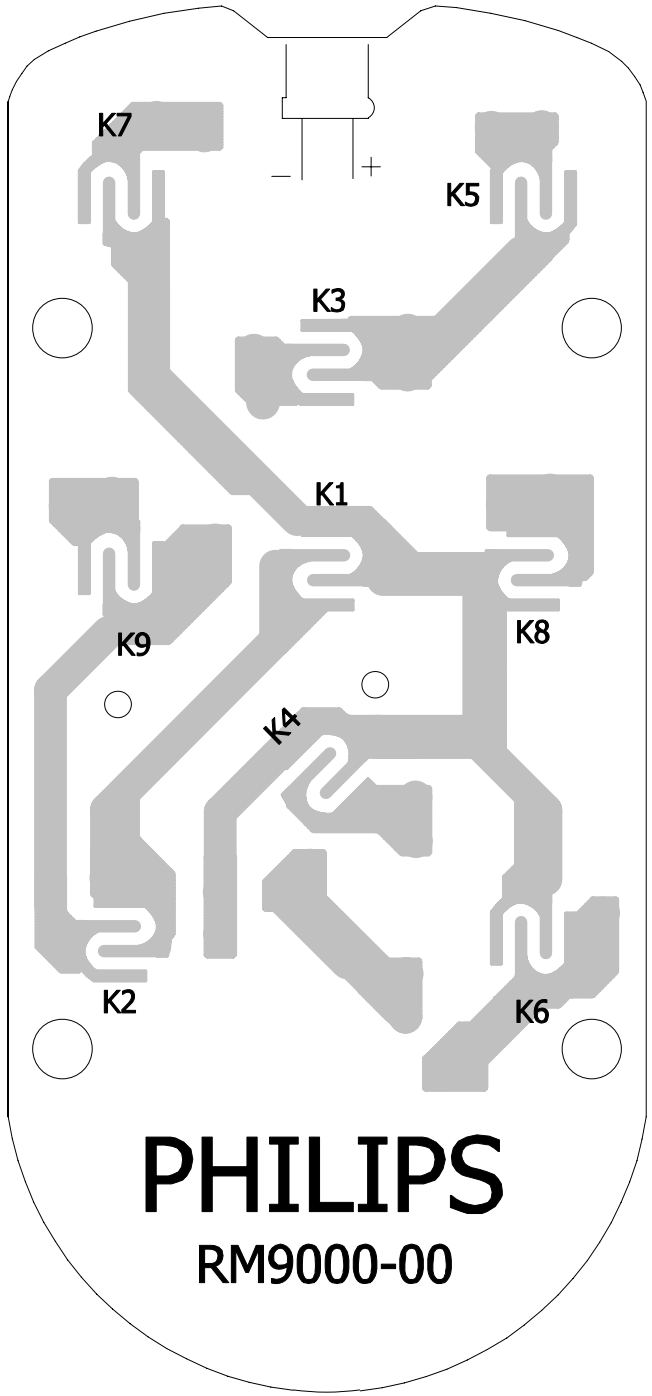
PCB LAYOUT-PANEL BOARD TOP SIDE VIEW



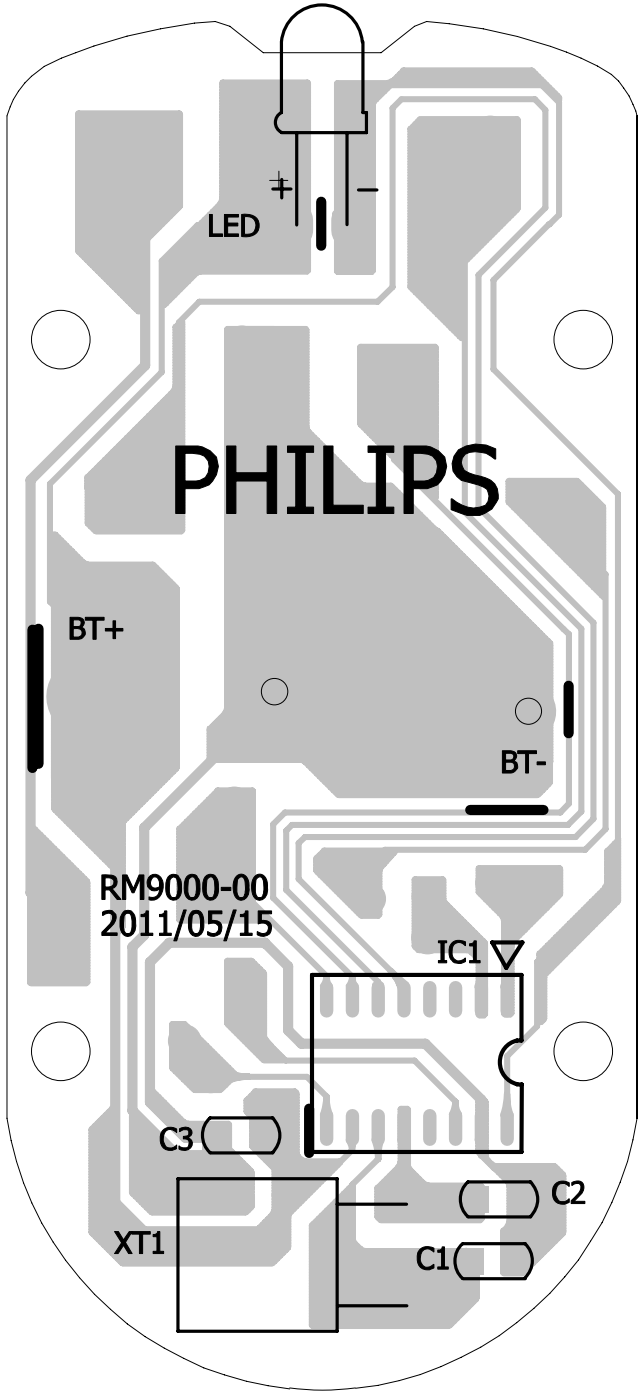
PCB LAYOUT-PANEL BOARD BOTTOM SIDE VIEW



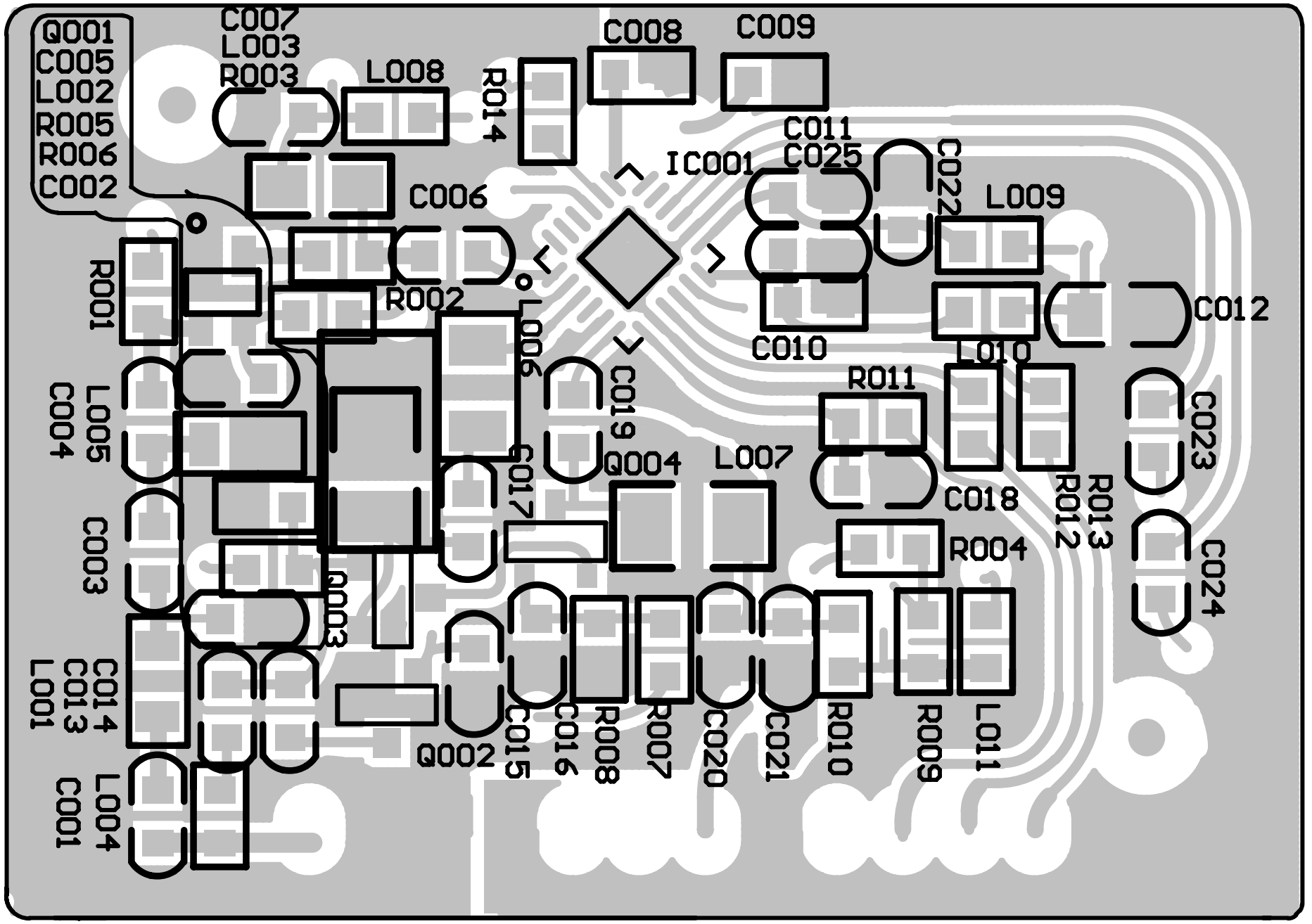
PCB LAYOUT-REMOTE BOARD TOP SIDE VIEW



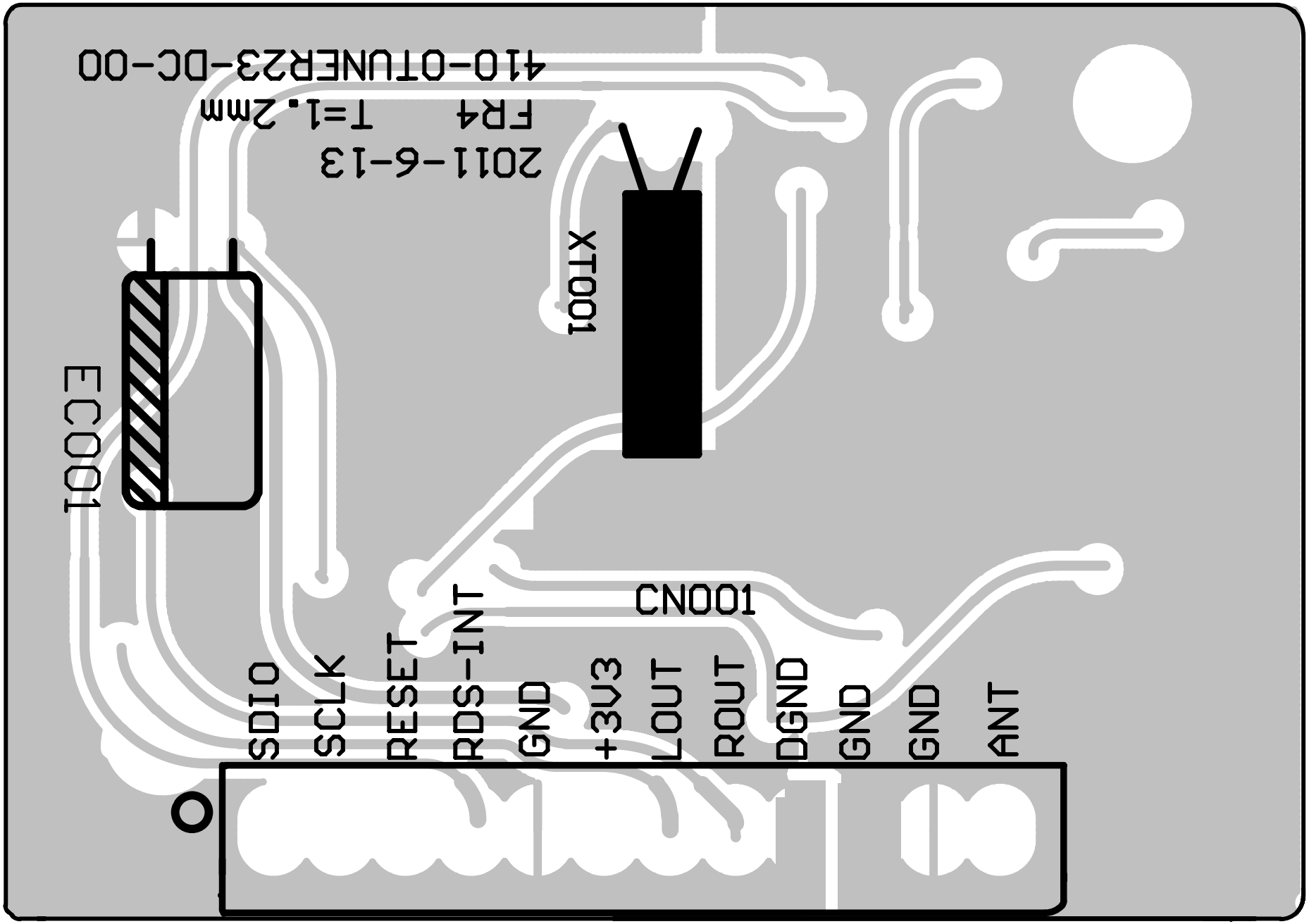
PCB LAYOUT-REMOTE BOARD BOTTOM SIDE VIEW



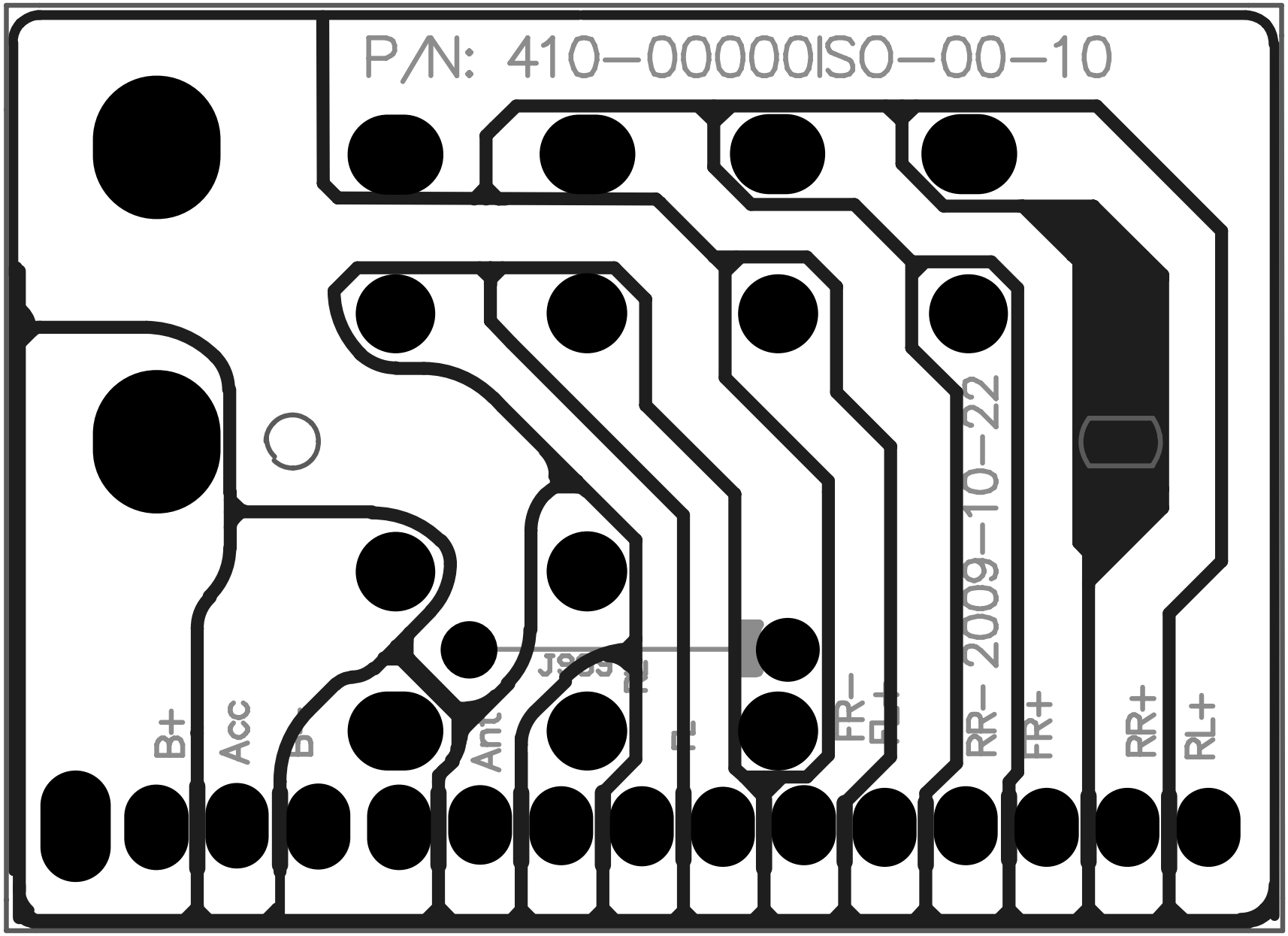
PCB LYOUT-TUNER BOARD TOP SIDE VIEW



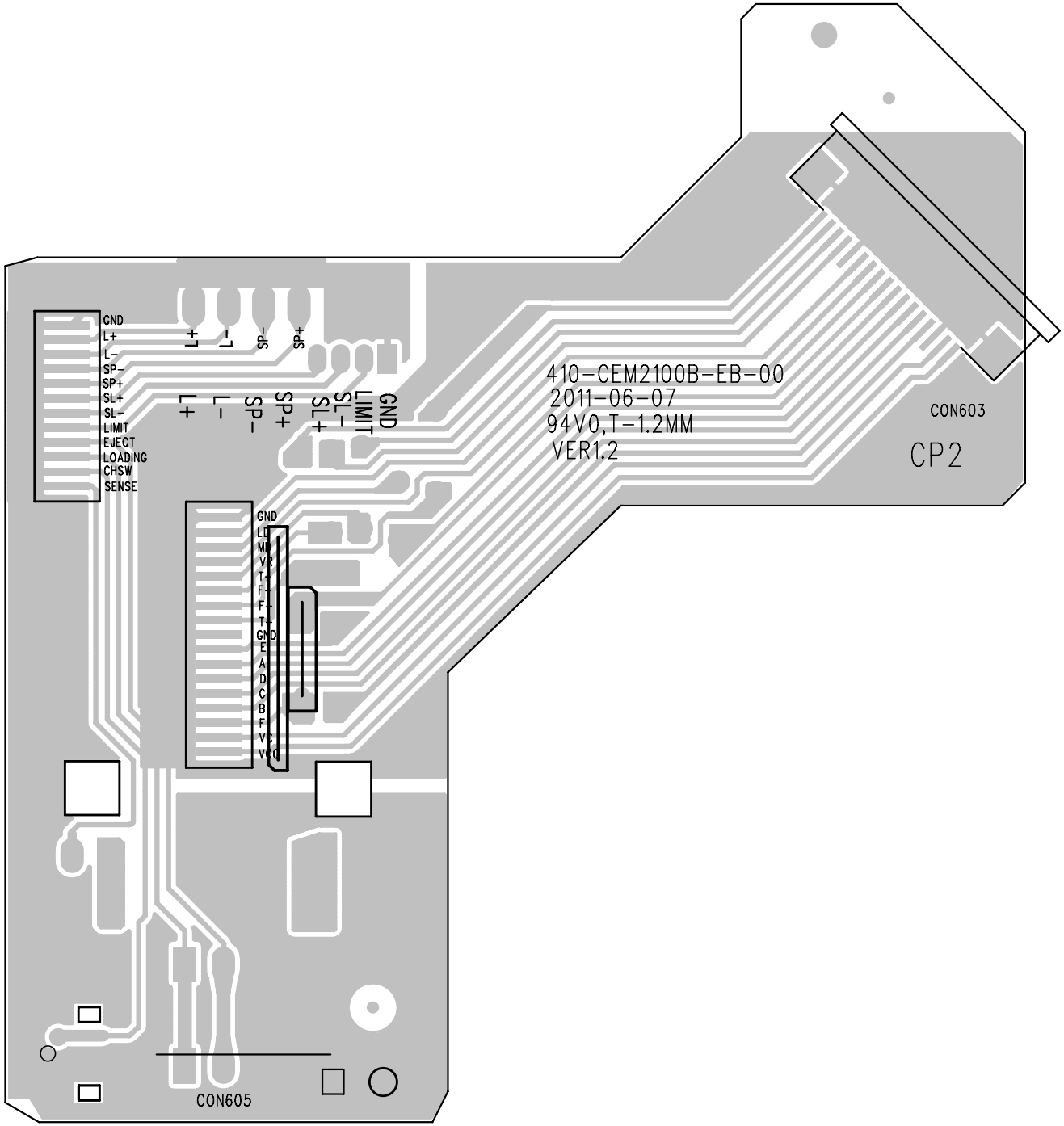
PCB LYOUT-TUNER BOARD BOTTOM SIDE VIEW



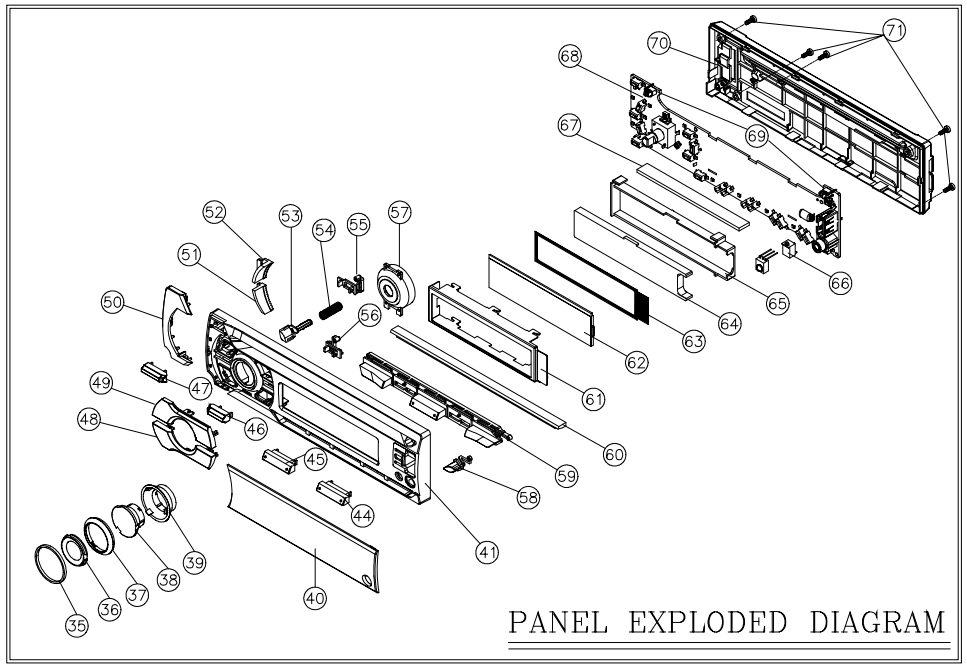
PCB LAYOUT-ISO BOARD BOTTOM SIDE VIEW

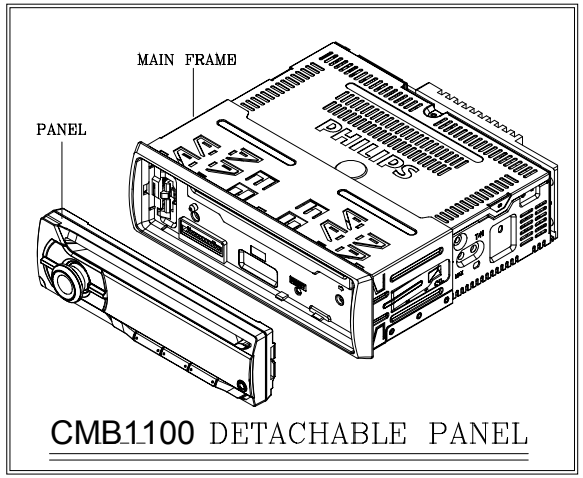


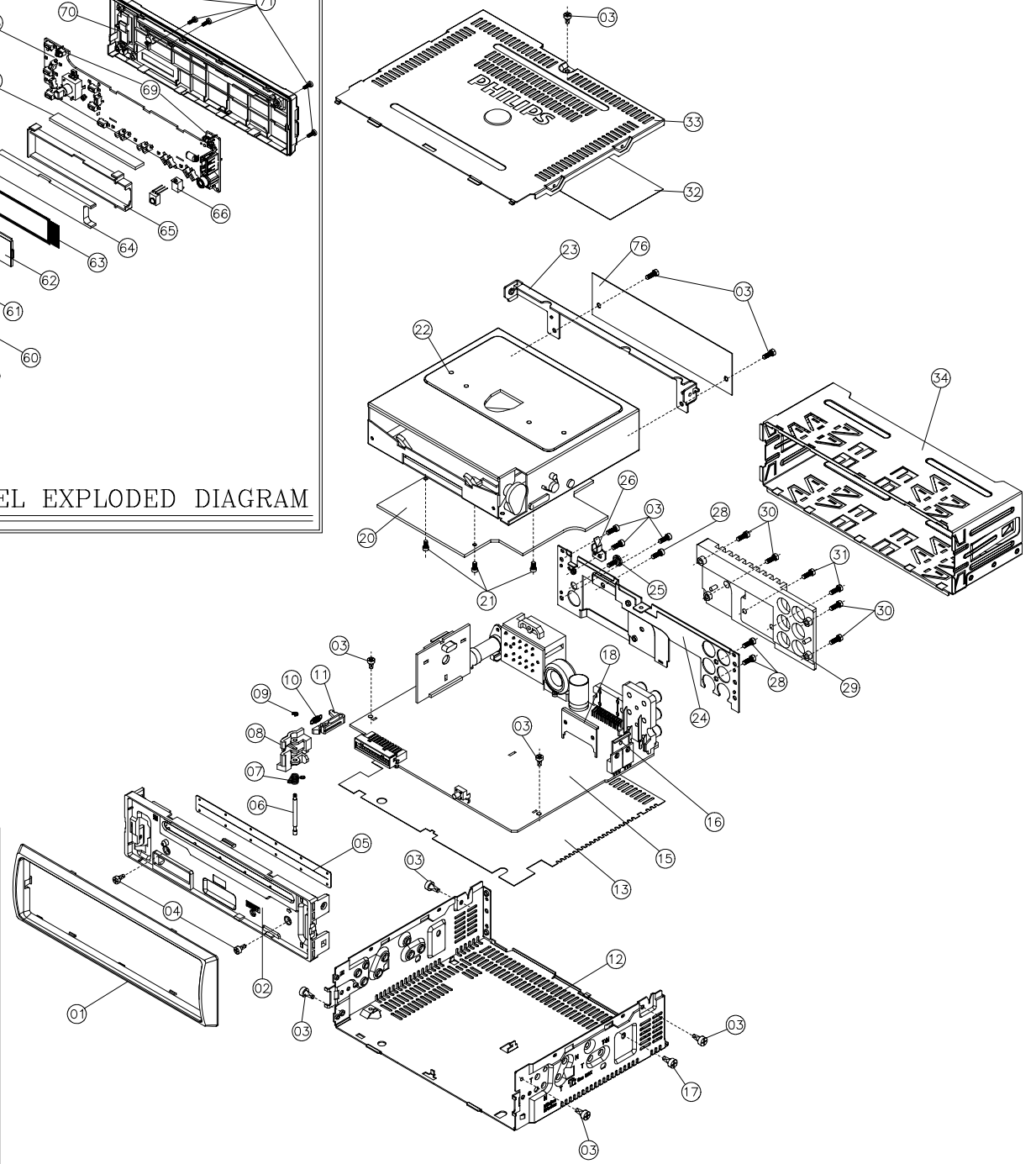
PCB LAYOUT-CD CONNECTOR BOARD TOP SIDE VIEW



SET EXPLODER VIEW DRAWING







Trouble shooting

Product Model	CMB1100	Area	All Area	Date	2011-11-15

NO.	failure	failure cause	remark
1	NO Power	a. To check whether it is connect well of the ISO connector (4PIN power input). Whether it is loose of the 15A fuse of the ISO connector, or insert non in place.	
		b. To check whether the reset button Sw201 is long term functional then caused short circuit and no power.	
		c. To check whether there is any contamination and bad contact on the 22 Pin male/female connector on the panel and main board.	
		d. To check the power supply of main board B+、ACC should be +12V; The voltage of stabilivolt of ACC power supply circuit ZD210 (6V8) should be 6V8.	
		e. To check the voltage of the 19 pin (AVDD) of MCU (T5CL8) should be +3V3; The output voltage of IC307 (LM2950) should be +3V3.	
		f. To check the oscillation frequence of crystal X201 , shuold be 8MHz, and for the crystal X202 should be 32.768KHZ.	
		g. To check Panel LED +5V voltage , should be normal.	
2	NO audio output	a. To check whether the volume knob is turn to the minimum position.	
		b. To check whether the unit is at MUTE mode, press SOURCE button and check whether it is effective of the input sound source.	
		c. To check whether the connection of 8PIN audio output wire of ISO connector is correct; wrong connection or short circuit to the ground will caused the protection of the power amplifier(no voltage output).	
		d . To check the circuit of power amplifier IC501 (LV47004) and VOL IC403 (PT7313E).	
		e. To check the normal voltage of 22 PIN(MUTE) of power amplifier IC501(LV47004) , normally should be 4V.	
		f. To check the voltage of control PIN SDA、SCL（the 27、28pin）of audio processor IC402（PT7313E）, should be +3V3.	
3	Radio abnormal	a. To check the antenna of the tuner.	
		b. To check whether the strength of then input signal of the tuner is too weak.	
		c. To check the voltage of the 7 pin(VDD) of the tuner , should be +3V3.	
		d. To check the voltage of the 10 pin(RES) of the tuner, should be +3V6; the 11 pin(CLK) should be +3V1; the 12 pin(date) should be +2V8.	
		e. To check the oscillation frequence of crystal XT001 of the tuner, should be 32.768KHZ.	
		f. To check the L output voltage of the 5 pin of tuner should be 1V5, the 6 pin R output voltage , should be 1V5.	

NO.	failure phenomena	failure cause	remark
4	CD defective	a. To check whether the signal format of the disc is correspond to the request of the unit, whether there is any contamination or damage or light leakage on the surface of the disc.	
		b. To check whether there is any abnormal of the rotation of the deck mecahnism, or whether the disc is enter in position.	
		c. To check whether it is normal when reading USB?	
		d. To check whether the 17 P FFC of laser pick up is inserted in place, whether the socket of it is loose.	
		e. To check whether there is any contamination or foreign body on the surface of the laser pick up.	
		f. To check the servo connector of CON601、CON602.	
		g. To check the oscillation frequence of crystal X602 , should be 16.9344M.	
		h. To check the oscillation frequence of crystal X603 , should be 9MHZ.	
		i. To check the voltage of the 50 pin of IC 602, should be 3.3V.	
		j. To check the switch S601 on the servo board.	
		k. To check the rotation mechanism of CD deck mechanism.	
		l. To check the voltage of the 8 pin of IC 603, should be +8V.	
		m. To check whether the rotation belt of deck mechanism is dislocation or loose.	
5	AUX defective	a. To check the SOURCE shoule be in MP3-LINK mode.	
		b. To check the AUX IN input signal.	
		c. To check whether there is any contamination and bad contact on the male/female connector of the panel and main board. If necessary, can exchange the panel to test whether the defective is occurred by the unit or panel.	